

1. INTRODUCTION

The California Department of Fish and Game (DFG) manages the approximately 14,000-acre Napa-Sonoma Marshes Wildlife Area (NSMWA or the Marshes). The NSMWA is in the San Pablo Bay region of San Francisco Bay Estuary (**Figure 1**), one of the largest estuaries in North America. Originally one of the richest wetland ecosystems in the nation, the San Francisco Estuary once comprised more than 4,600 square miles of habitat, ranging from open water mud flats to tidal salt, brackish, and freshwater marshes to associated upland grasslands and riparian areas. The area was of global importance to the millions of migrating shorebirds and waterfowl that used it, as well as the resident populations of mammals, fish, and crustaceans. Since the first Spanish explorers arrived, more than 90% of the wetland habitats have been dramatically altered or destroyed (CDFG 2008) (**Figure 2**). Much of the area was reclaimed around the turn of the century for agricultural uses, and in the 1950s, approximately 7,000 acres were diked and used for solar salt production by Leslie Salt, Inc. (Wyckoff 2000).

The Marshes support a variety of habitats and a diversity of fish and wildlife, including thousands of waterfowl and shorebirds migrating on the Pacific Flyway, fish spawning, rearing, and migration, and small mammals using high marsh, levees, riparian areas, and grasslands. This NSMWA Land Management Plan (LMP) addresses management of the tidal and seasonal wetlands, sloughs, managed ponds, former salt ponds, riparian corridors, and upland grasslands. The LMP presents practical, science-based management and conservation of the natural resources of the NSMWA based on an ecosystem approach to habitat management. This LMP is intended to integrate management of all NSMWA wetland and upland habitats. The LMP habitat management approach uses natural processes to create a sustainable system over the long term. The management approach is intended to benefit both common and sensitive species of wildlife and plants and may contribute to the recovery of state and federally listed species. The LMP has been developed with guidance from the DFG's Guide and Annotated Outline for Preparing Land Management Plans (CDFG 2006a).

1.1 THE MISSION OF THE CALIFORNIA DEPARTMENT OF FISH AND GAME

The mission of DFG is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. DFG manages fish, wildlife and plant species, and natural communities for their intrinsic and ecological value and their benefits to the citizens of California. The mission includes the goal of maintaining and protecting habitat in an amount and quality sufficient to ensure the survival of all native species using the area and natural communities that support those species. DFG is also responsible for managing the many uses of fish and wildlife, including recreational, commercial, scientific, and educational.

The LMP represents the commitment of DFG to manage the resources of the NSMWA in accordance with the laws of the United States and the State of California, incorporating the best

available scientific information and professional judgment. It also incorporates the commitment of DFG to coordinate and cooperate with NSMWA neighbors, other local stakeholders, and other conservation entities that are active through the region. Funding for the development of this LMP was provided by the Wildlife Conservation Board (WCB) and administered through the California Wildlife Foundation (CWF). Funding of the NSMWA and other wildlife areas comes in large part through hunting and fishing licenses issued in California.

1.2 CALIFORNIA DEPARTMENT OF FISH AND GAME WILDLIFE AREAS

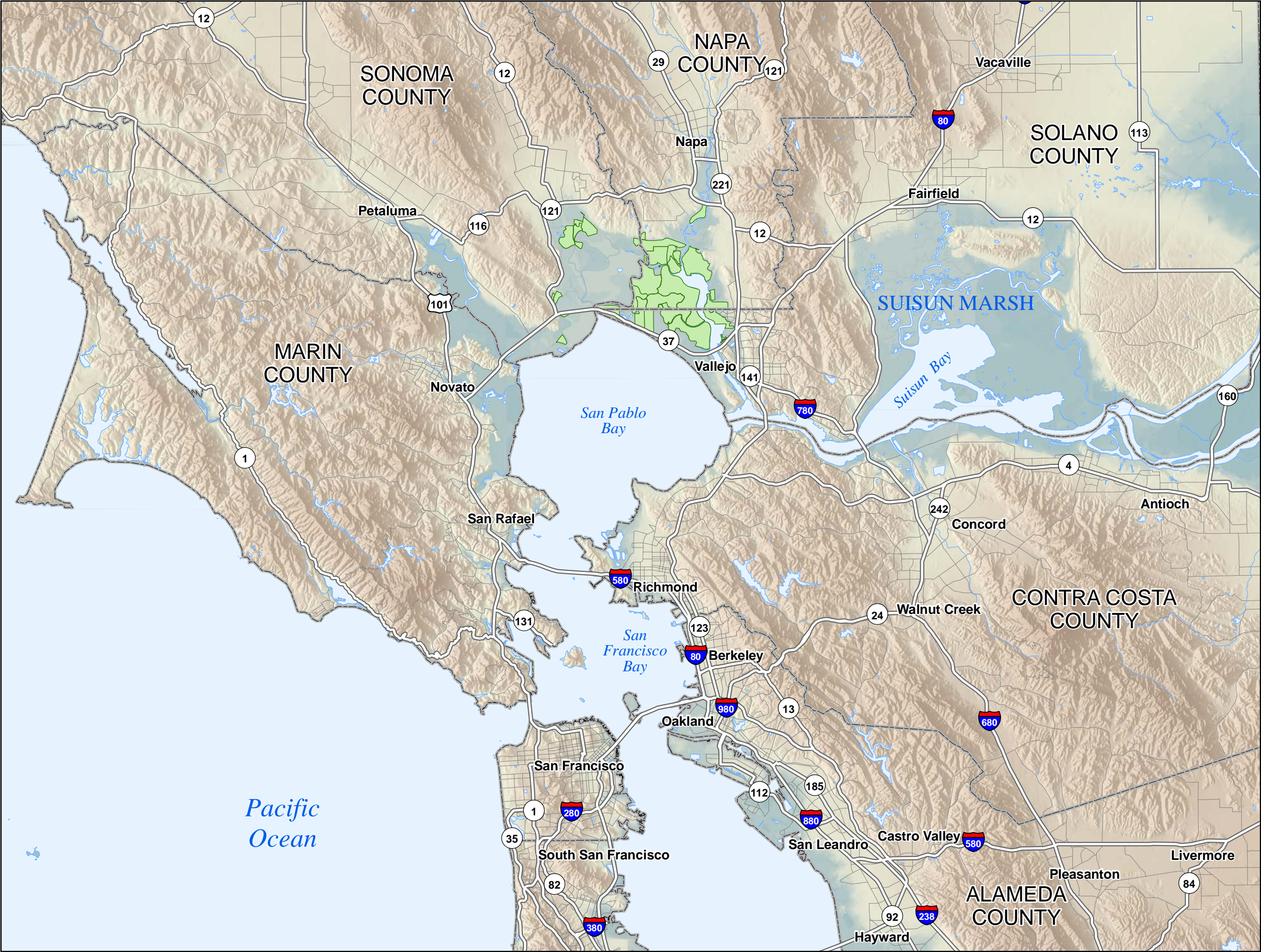
California is renowned as a land with magnificent natural scenery and a wealth of wildlife. Some of the state's most important sites for wildlife are designated DFG wildlife areas. These areas, including the NSMWA, provide habitat for a wide array of plant and animal species, including many that are listed for protection under state and federal endangered species acts or otherwise protected due to their rarity. Consistent with its mission, DFG administers 108 state wildlife areas and ecological reserves that encompass approximately 650,000 acres of wildlife habitat. These areas are located throughout the state, with most in central and northern California. NSMWA falls within DFG's Bay-Delta Region. Major wildlife areas in the Bay-Delta region include Petaluma Marsh, San Pablo Bay, and NSMWA. DFG's stated purpose in managing these wildlife areas is:

... to protect and enhance habitat for wildlife species, and to provide the public with compatible, wildlife-related recreational uses.

The principal natural resource management consideration for the NSMWA is to restore and enhance a mosaic of habitats, including tidal salt and brackish water marshes, managed ponds, seasonal wetlands, and adjacent uplands, that will benefit many species of rare, threatened, and endangered species as well as a broad range of fish, wildlife, and plant species. The LMP also focuses on the management of wildlife-related recreational activities that are compatible with the diverse mosaic of habitats because DFG is committed to providing wildlife compatible recreation.




1.3 PURPOSE OF THE NSMWA LAND MANAGEMENT PLAN

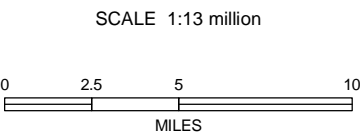
Continued acquisition, restoration, and management of the NSMWA will increase habitat area and improve habitat quality for the thousands of migratory waterfowl and shorebirds that depend on the area for feeding, resting, and nesting. Fish and other aquatic species will benefit with the addition of many thousands of acres of new habitat. The restoration of these lands will create a greatly expanded habitat base for the benefit of plants, wildlife, and fish and other aquatic species, including rare, threatened, and endangered species (Wyckoff 2000).



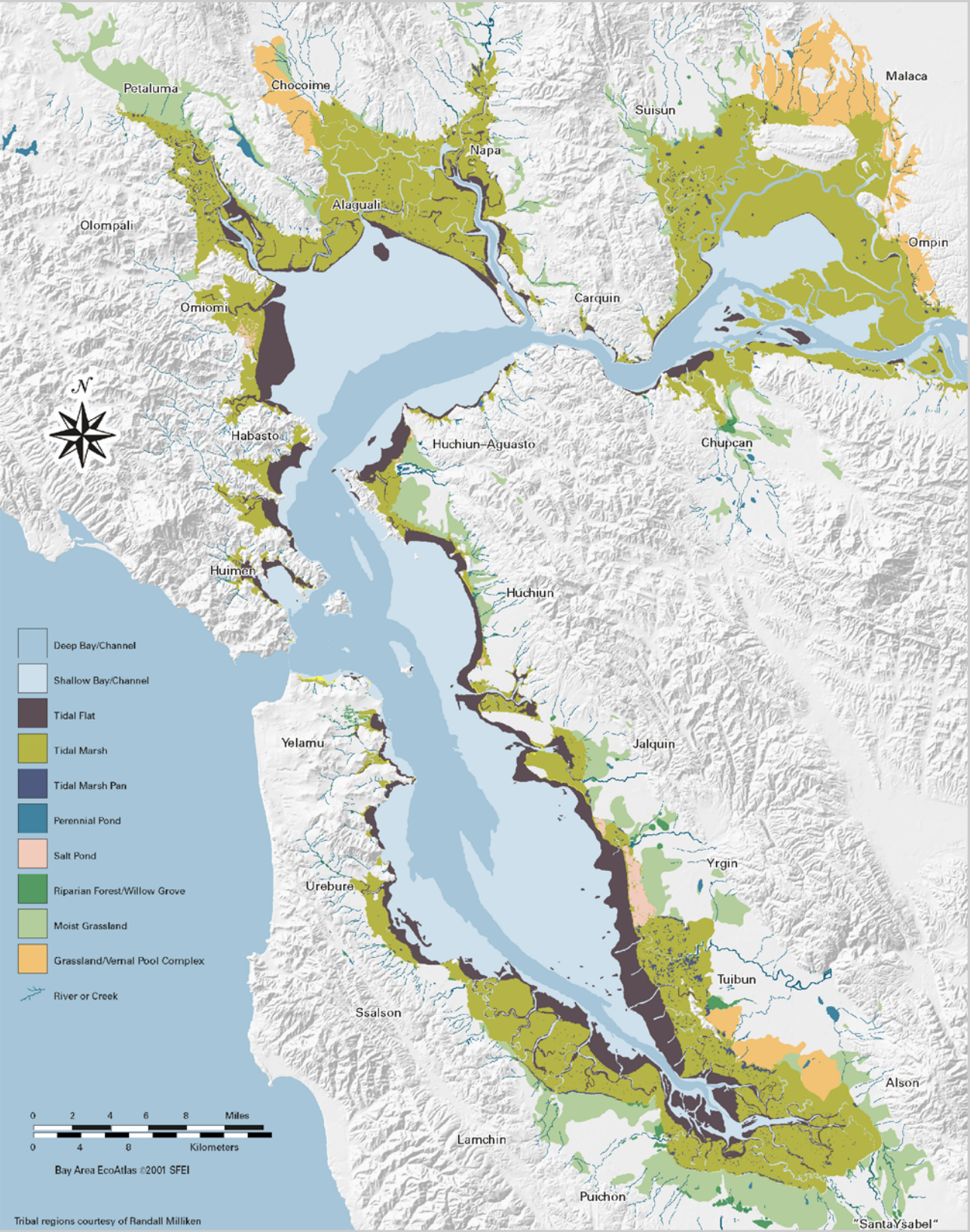
Napa Sonoma Marshes
Wildlife Area
Land Management Plan
FIGURE 1

**Project Vicinity
Map**

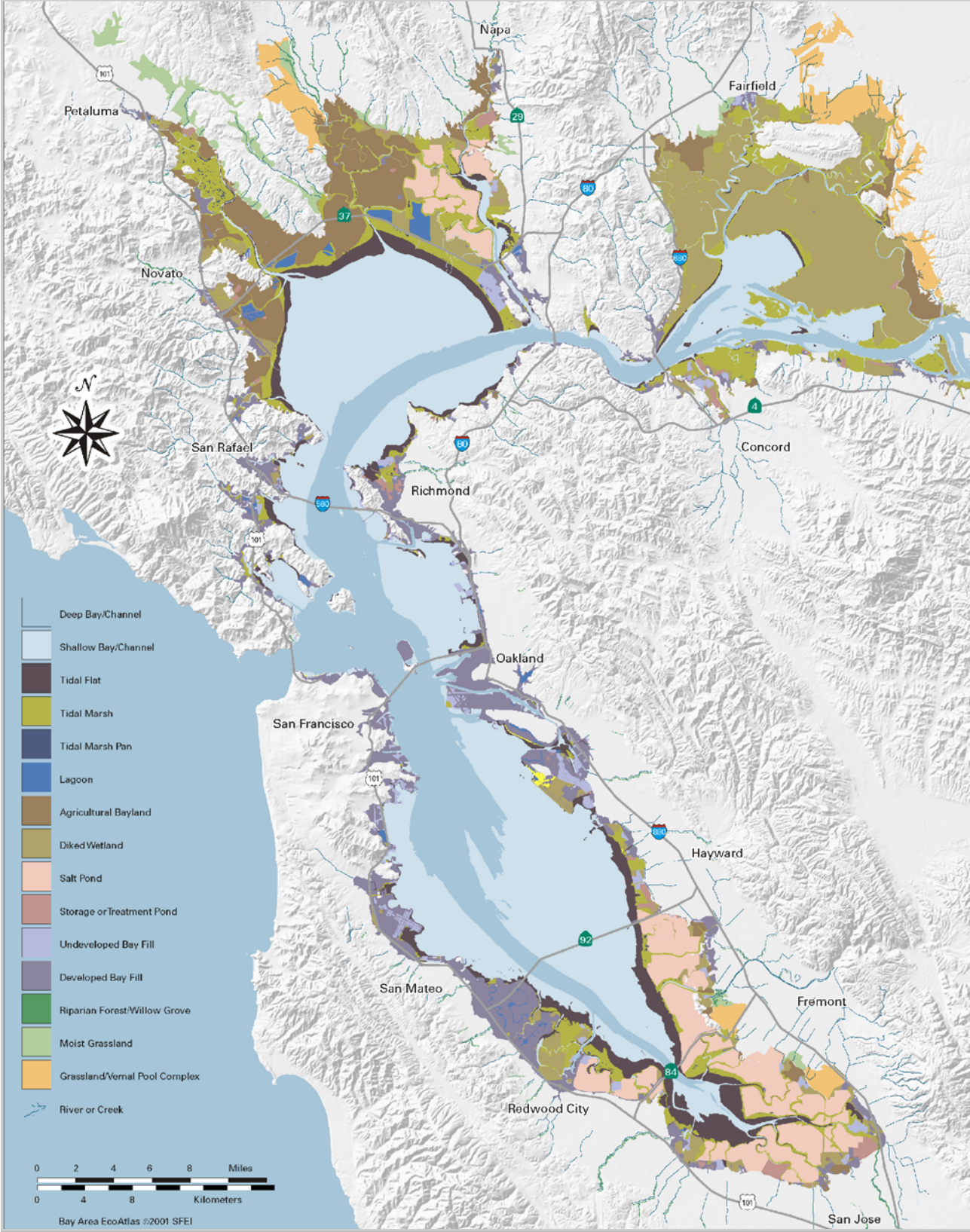
-  Management Unit
-  County boundary
-  Major road



Historical Baylands circa 1800



Modern Baylands circa 1998



Napa Sonoma Marshes
Wildlife Area
Land Management Plan

FIGURE 2

Historical and
Modern Baylands

Map and data source:
Bay Area EcoAtlas Version 1.50b4,
San Francisco Estuary Institute, 1998

The purposes of the Napa-Sonoma Marshes Wildlife Area Land Management Plan are:

- To guide the adaptive management of habitats, species, and programs described herein by achieving the DFG's mission of protecting and enhancing fish, wildlife, and native plant values
- To serve as a guide for appropriate public uses of the property
- To serve as a descriptive inventory of fish, wildlife, and native plant habitats that occur on or use this property, and to outline appropriate public uses of these resources
- To provide an overview of the area's operation and maintenance and personnel requirements to implement management goals and objectives and to serve as a budget planning aid for annual budget preparation
- To identify environmental impacts and subsequent mitigation that may occur during management; the LMP contains environmental documentation to comply with state and federal statutes and regulations

1.4 DEVELOPMENT OF THE NAPA-SONOMA MARSHES WILDLIFE AREA AND LAND MANAGEMENT PLANS

In the 1970s, the State of California began purchasing parcels to create the NSMWA (Wyckoff 2002). The Draft Interim NSMWA LMP was prepared in 1997 and updated in 2000 (Wyckoff 1997, 2000). It provided guidance primarily for the management and restoration of 7,000 acres of salt ponds acquired in 1994. The NSMWA has grown substantially since the first plans were written and now encompasses approximately 14,000 acres distributed among 12 Management Units acquired in more than 37 transactions between 1975 and 2004. The primary purposes of the NSMWA land acquisitions are to protect existing wetlands and restore and enhance areas of the Marshes that were historically wetlands. Land acquisitions since 2000 include the Southern Crossing Unit, Little Island Farms, and the Green Island Unit (Napa Plant Site [NPS]) (**Figure 3**). The acquisition history of each Management Unit is described in **Section 2**.

Much restoration planning and implementation has taken place since the first interim plans were released, advancing the understanding of salt marsh ecology and restoration. Multi-year datasets now exist for fish, avian, small mammal, macro invertebrate, and plant colonization from monitoring of the early restoration work implemented in the NSMWA Napa River Unit. Tidal action was restored to Pond 2A in 1995 and 1997 and to Ponds 3, 4, and 5 in 2006–2007; levees were repaired to maintain managed Ponds 1 and 1A. Restoration projects at the Huichica Creek Unit and the Wingo Management Unit were implemented and are currently being monitored. The Green Island Central Unit is scheduled to be breached in 2008, and the Green Island South Unit breaching is planned for 2010–2012. The 90% Restoration design was completed for Ponds 6, 6A, 7, 7A, and 8 in February of 2008.

Potential acquisitions include properties such as the former Port of Oakland lands, totaling 461 acres, purchased by the City of American Canyon using a CALFED grant awarded under the

1998 CALFED Ecosystem Restoration Program Plan (ESA 2000). This land parcel is bordered by the American Canyon Sanitary Landfill along the northwestern boundary, the American Canyon Unit along the southern and southwestern boundaries, and the City of American Canyon to the east. The grant stipulated that not less than 70% of the property will be granted in fee title to the DFG to manage as part of the NSMWA. The City of American Canyon will restore the lands with CALFED funds before they are transferred to the DFG. An addition to the Southern Crossing Unit (Stanly Ranch) acquisition of the 170-acre North Stanly Ranch is currently in progress (Wyckoff 2007).

1.5 LAND MANAGEMENT PLAN ORGANIZATION

This Draft Land Management Plan for the NSMWA is organized as follows:

- *Chapter 1, "Introduction,"* summarizes the purpose of the land acquisition for the NSMWA, acquisition history, purpose of the LMP, and the planning process and explains the scope and uses of the LMP.
- *Chapter 2, "Property Description and Management Setting,"* summarizes the most current information available to describe the geographical setting, property boundaries and easements, existing infrastructure, and management setting, including legal constraints, existing agreements, and descriptions of existing working partnerships with other agencies and nonprofit groups.
- *Chapter 3, "Environmental Setting,"* describes the primary existing resource conditions on the property and includes a discussion of planning influences and considerations.
- *Chapter 4, "Resource Management and Public Use Issues,"* describes general rules and regulations of the NSMWA and management issues.
- *Chapter 5, "Management Goals,"* describes the resource management direction of the LMP and the project description necessary for performing environmental review pursuant to CEQA. The chapter includes conceptual descriptions of management actions.
- *Chapter 6, "Operations and Maintenance,"* guides the budget preparation and work plans for the property; summarizes the number of staff employed at the property and any additional requirements for personnel; summarizes all estimated operations and maintenance costs associated with management of the property; and lists potential funding sources.
- *Chapter 7, "Future Revisions to the Plan,"* describes the process that will be used to update and revise to the LMP.
- *Chapter 8, "Document Preparers,"* lists the agencies involved in preparation or review of the LMP and the individuals who prepared the LMP.
- *Chapter 9, "References and Personal Communications,"* lists the sources of information cited throughout the LMP.

Management Unit Boundaries

Other

Ecological Reserve (proposed after restoration monitoring is complete in 2024), closed to hunting (DFG, future)

 Railroad

NRU = Napa River Unit
HCU = Huichica Creek Unit



URS
OCTOBER 2009

